

MONTANA DEPARTMENT OF TRANSPORTATION INVITATION FOR BID (IFB)

(THIS IS NOT AN ORDER)

IFB Number: IFB Title:

#HWY-309600-RP OVERLAY US-93 NORTH RONAN SOUTH, MISSOULA DIVISION

IFB Due Date and Time:

MAY 21, 2010 3:00 pm, Local Time Number of Pages: 35

ISSUING AGENCY	INFORMATION
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Procurement Officer: RICHELE PARKHURST

Issue Date: MAY 11, 2010

MONTANA DEPARTMENT OF TRANSPORTATION
PURCHASING SERVICES SECTION
424 MOREY STREET
PO BOX 20437
BILLINGS MT 59104-0437

Phone: (406) 657-0274 Fax: (406) 256-6487 TTY Users, (406) 444-7696

Website: http://gsd.mt.gov/

INSTRUCTIONS TO BIDDERS

COMPLETE THE INFORMATION BELOW AND RETURN THIS PAGE WITH YOUR SEALED BID AND ANY REQUIRED DOCUMENTS TO:

#HWY-309600-RP
PURCHASING SERVICES SECTION
424 MOREY STREET
PO BOX 20437
BILLINGS MT 59104-0437

Mark Face of Envelope/Package:

IFB Number: #HWY-309600-RP IFB Due Date: MAY 21, 2010

SEALED BIDS will be received and publicly opened

in the Billings office at 3:00 pm

Attachments: 2

BIDDERS MUST COMPLETE THE FOLLOWING	
Federal Tax ID Number:	Completion Date:
Bidder Name/Address:	Authorized Bidder Signatory:
	(Please print name and sign in ink)
Bidder Phone Number:	Bidder FAX Number:
Bidder E-mail Address:	
IMPORTANT: SEE STANDAR	RD TERMS AND CONDITIONS

BILL TO: DEPT OF TRANSPORTATION

PO BOX 7039

MISSOULA MT 59807-7039

PROJECT SITE: DEPT OF TRANSPORTATION
US 93 NORTH (RONAN SOUTH)
MILEPOST 46.5 TO 44.9

Questions may be directed to Jack May at (406) 523-5803 in Missoula. However, any changes to the requirements of the Invitation for Bid (IFB) can only be made by the Montana Department of Transportation (Department) in writing and claimed oral modifications are not valid or binding.

1.0. STANDARD TERMS AND CONDITIONS

By submitting a response to this invitation for bid, request for proposal, or acceptance of a contract, the Contractor agrees to acceptance of the following Standard Terms and Conditions and any other provisions that are specific to this solicitation or contract.

1.1. ACCEPTANCE/REJECTION OF BIDS OR PROPOSALS

The Department reserves the right to accept or reject any or all bids or proposals, wholly or in part, and to make awards in any manner deemed in the best interest of the Department. Bids and proposals will be firm for 30 days, unless stated otherwise in the text of the invitation for bid or request for proposal.

1.2. ACCESS AND RETENTION OF RECORDS

The Contractor agrees to provide the Department, Legislative Auditor, or their authorized agents, access to any records necessary to determine contract compliance (Mont. Code Ann. § 18-1-118). The Contractor agrees to create and retain records supporting the services rendered or supplies delivered for a period of 3 years after either the completion date of the contract or the conclusion of any claim, litigation or exception relating to the contract taken by the State of Montana or third party.

1.3. ALTERATION OF SOLICITATION DOCUMENT

In the event of inconsistencies or contradictions between language contained in the Department's solicitation document and a Contractor's response, the language contained in the Department's original solicitation document will prevail. Intentional manipulation and/or alteration of solicitation document language will result in the Contractor's disqualification and possible debarment.

1.4. ANTITRUST ASSIGNMENT CLAUSE

All vendors, Contractors and subcontractors hereby assign to the State of Montana any and all claims or causes of action for any antitrust law violations or damages arising therefrom as to goods, materials and services purchased under the terms of this agreement and any change order that may result from this agreement. This assignment is made on behalf of the vendor, Contractor and all subcontractors, which may be hired or contracted with to furnish goods, materials or services.

1.5. ASSIGNMENT, TRANSFER AND SUBCONTRACTING

The Contractor shall not assign, transfer or subcontract any portion of the contract without the express written consent of the Department. (Mont. Code Ann. § 18-4-141.)

1.6. AUTHORITY

The following bid, request for proposal, limited solicitation, or contract is issued in accordance with Title 18, Montana Code Annotated and the Administrative Rules of Montana, Title 2, chapter 5.

1.7. BILLING

The State of Montana cannot pay for materials or services in advance. All billing against this purchase order must be made only after completion of receipt of merchandise or services rendered.

1.8. COLLUSION PROHIBITED

Prices quoted shall be established without collusion with other Contractors and without attempt to preclude the Department from obtaining the lowest possible competitive price.

1.9. COMPLIANCE WITH LAWS

The Contractor must, in performance of work under the contract, fully comply with all applicable federal, state or local laws, rules and regulations, including the Montana Human Rights Act, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Any subletting or subcontracting by the Contractor subjects subcontractors to the same provision. In accordance with section 49-3-207, MCA, the Contractor agrees that the hiring of persons to perform the contract will be made on the basis of merit and qualifications and there will be no discrimination based upon race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability or national origin by the persons performing the contract.

1.10. CONFORMANCE WITH CONTRACT

No alteration of the terms, conditions, delivery, price, quality, quantities or specifications of the contract shall be granted without prior written consent of the Department of Transportation Purchasing Section. Supplies delivered which do not conform to the contract terms, conditions and specifications may be rejected and returned at the Contractor's expense.

1.11. DEBARMENT

The Contractor certifies, by submitting this bid or proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the Contractor cannot certify this statement, attach a written explanation for review by the State.

1.12. DISABILITY ACCOMMODATIONS

The State of Montana does not discriminate on the basis of disability in admission to, access to, or operations of its programs, services or activities. Individuals, who need aids, alternative document formats or services for effective communications or other disability-related accommodations in the programs and services offered are invited to make their needs and preferences known to this office. Interested parties should provide as much advance notice as possible.

1.13. EXCEPTIONS

A prospective Contractor may take "exception" to bid terms, conditions, specifications and dates stated within the bid package. However, the Department reserves the right to disqualify any and all bids submitted which include exceptions, if deemed not in the Department's best interest.

1.14. FACSIMILE RESPONSES

Facsimile bids sent directly to the Department of Transportation will not be accepted; however, facsimile bids sent to a 3rd party and then delivered to the Department in a properly addressed, sealed envelope will be accepted.

1.15. FAILURE TO HONOR BID/PROPOSAL

If a bidder/Contractor to whom a contract is awarded refuses to accept the award (PO/contract) or, fails to deliver in accordance with the contract terms and conditions, the Department may, in its discretion, suspend the bidder/Contractor for a period of time from entering into any contracts with the State of Montana.

1.16. FORCE MAJEURE

Neither party shall be responsible for failure to fulfill its obligations due to causes beyond its reasonable control, including without limitation, acts or omissions of government or military authority, acts of God, materials shortages, transportation delays, fires, floods, labor disturbances, riots, wars, terrorist acts or any other causes, directly or indirectly beyond the reasonable control of the non-performing party, so long as such party is using its best efforts to remedy such failure or delays.

1.17. HOLD HARMLESS/INDEMNIFICATION

In regard to all duties relating to safety, regardless of whether any such duties are, or are alleged to be, "nondelegable" (e.g., the Montana Scaffolding Act, Montana Safe Place to Work Statute, etc.), as well as matters involving patent, trademark and copyright infringements, Contractor agrees that it will defend, protect, indemnify and save harmless the State of Montana and Department against and from all claims, liabilities, demands, causes of action, judgments (including costs and reasonable attorneys fees), and losses to them from any cause whatever (including any patent, trademark and copyright infringement) arising from the project. This indemnification expressly includes any claim or liability arising from a violation of law, ordinance or regulation. Contractor assumes all responsibility for ensuring and enforcing safe working conditions and compliance with all safety-related rules and regulations for the benefit of its own employees, the employees of its subcontractors, and the public. This indemnification is expressly intended by the parties to include claims, liabilities, demands, causes of action, judgments (including costs and reasonable attorneys fees), and losses that are, or are alleged or held to be, based upon a breach by the State or Department of a nondelegable duty relating to workplace safety for the Contractor's employees, the employees of any subcontractor's employees, or the public.

This indemnification does not extend to CERCLA and CECRA claims, which are addressed in section 107.26 of the specifications. Contractor will be responsible for any and all damages to property or persons that occur before final acceptance of the project. Contractor will obtain and maintain insurance necessary to comply with the specifications.

The Contractor shall indemnify, protect and defend the owner (State and Department) from any damage, loss or claim of damage arising from, due to or allegedly due to an action or omission of the Contractor or any of its employees and further to protect, hold harmless and indemnify the Department and State from any damages, loss, or claims due to or allegedly due to an act or omission of any subcontractor on the project.

Other than the above indemnifications, each party shall be liable for its own negligence.

1.18. LATE BIDS AND PROPOSALS

Regardless of cause, late bids and proposals will not be accepted and will automatically be disqualified from further consideration. It shall be solely the Contractor's risk to assure delivery at the designated office by the designated time. Late bids and proposals will not be opened and may be returned to the Contractor at the expense of the Contractor or destroyed if requested.

1.19. PAYMENT TERM

All payment terms will be computed from the date of delivery of supplies or services OR receipt of a properly executed invoice, whichever is later. Unless otherwise noted in the solicitation document, the Department is allowed 30 days to pay such invoices. All Contractors may be required to provide banking information at the time of contract execution in order to facilitate state electronic funds transfer payments.

1.20. PREPARATION OF BIDS

Bids must be written in ink and/or typewritten on bid forms furnished herewith. Erasures and alterations must be initialed by the Contractor in ink. Verbal bids will not be accepted. Facsimile bids sent directly to the Department will not be accepted; however, facsimile bids sent to a third party and then delivered to the Department in a properly addressed, sealed envelope will be accepted. Bid quotations shall be considered firm for 30 days after the date of opening unless otherwise stated in writing within the bid package.

1.21. RECIPROCAL PREFERENCE

The State of Montana applies a reciprocal preference against a Contractor submitting a bid from a state or country that grants a residency preference to its resident businesses. A reciprocal preference is only applied to an invitation for bid for supplies or an invitation for bid for nonconstruction services for public works as defined in section 18-2-401(9), MCA and then only if federal funds are not involved. For a list of states that grant resident preference, see http://gsd.mt.gov/ProcurementServices/preferences.mcpx.

1.22. REFERENCE TO CONTRACT

The contract or purchase order number MUST appear on all invoices, packing lists, packages and correspondence pertaining to the contract.

1.23. REGISTRATION WITH THE SECRETARY OF STATE

Any business intending to transact business in Montana must register with the Secretary of State. Businesses that are incorporated in another state or country, but which are conducting activity in Montana, must determine whether they are transacting business in Montana in accordance with sections 35-1-1026 and 35-8-1001, MCA. Such businesses may want to obtain the guidance of their attorney or accountant to determine whether their activity is considered transacting business.

If businesses determine that they are transacting business in Montana, they must register with the Secretary of State and obtain a certificate of authority to demonstrate that they are in good standing in Montana. To obtain registration materials, call the Office of the Secretary of State at (406) 444-3665 or visit their website at http://sos.mt.gov/.

1.24. REJECTION OF BIDS

The Department reserves the right to reject any and all bids (wholly or in part) which fail to meet the terms, conditions and specifications of the bid package; or, are determined to be not in the Department's best interests; or, for which funding is not available. The Department reserves the right to reject bid proposals, waive technicalities or advertise for new proposals. Bids will be firm for 30 days, unless stated otherwise in the text of this invitation for bid.

A written or verbal explanation regarding rejected bids may be obtained by contacting the Purchasing Services Section (406) 657-0274 in Billings.

1.25. SEPARABILITY CLAUSE

A declaration by any court, or any other binding legal source, that any provision of the contract is illegal and void shall not affect the legality and enforceability of any other provision of the contract, unless the provisions are mutually dependent.

1.26. SHIPPING

Supplies shall be shipped prepaid, F.O.B. Destination, unless the contract specifies otherwise.

1.27. SOLICITATION DOCUMENT EXAMINATION

Contractors shall promptly notify the Department of any ambiguity, inconsistency or error, which they may discover upon examination of a solicitation document.

1.28. TAX EXEMPTION

The State of Montana is exempt from Federal Excise Taxes (#81-0302402).

1.29. TECHNOLOGY ACCESS FOR BLIND OR VISUALLY IMPAIRED

Contractor acknowledges that no state funds may be expended for the purchase of information technology equipment and software for use by employees, program participants or members of the public unless it provides blind or visually impaired individuals with access, including interactive use of the equipment and services, that is equivalent to that provided to individuals who are not blind or visually impaired. (Mont. Code Ann. § 18-5-603.) Contact the State Procurement Bureau at (406) 444-2575 for more information concerning nonvisual.

1.30. TERMINATION OF CONTRACT

Unless otherwise stated, the Department may, by written notice to the Contractor, terminate the contract in whole or in part at any time the Contractor fails to perform the contract.

1.31. UNAVAILABILITY OF FUNDING

The contracting agency, at its sole discretion, may terminate or reduce the scope of the contract if available funding is reduced for any reason. (Mont. Code Ann. § 18-4-313 (3).)

1.32. UNIT PRICE

Unless otherwise specified, the unit price for each line items must be provided in the appropriate space within the bid document. This shall be known as the "base" bid. The unit price for multiple items must be extended to reflect the total price for the quantity of items requested. Unless otherwise specified, the unit price shall prevail.

1.33. U.S. FUNDS

All prices and payments must be in U.S. dollars.

1.34. **VENUE**

This solicitation is governed by the laws of Montana. The parties agree that any litigation concerning this bid, request for proposal, limited solicitation, or subsequent contract, must be brought in the First Judicial District in and for the County of Lewis and Clark, State of Montana and each party shall pay its own costs and attorney fees. (Mont. Code Ann. § 18-1-401.)

1.35. WARRANTIES

The Contractor warrants that items offered will conform to the specifications requested, to be fit and sufficient for the purpose manufactured, of good material and workmanship and free from defect. Items offered must be new and unused and of the latest model or manufacture, unless otherwise specified by the State. They shall be equal in quality and performance to those indicated herein. Descriptions used herein are specified solely for the purpose of indicating standards of quality, performance and/or use desired. Exceptions will be rejected.

2.0. GENERAL REQUIREMENTS

2.1. BID/PROPOSAL SECURITY – SURETY BONDS ONLY

Each bid/proposal must be accompanied by bid proposal security based upon 10% of the total bid/offer. This security must be in the form of a surety bond licensed in Montana with a Best's rating of no less than A-. The surety bond must be supplied on the form designated by the State of Montana. The required form may be found at http://gsd.mt.gov/procurement/forms.asp and entitled "Bid or Proposal Bond." THE ORIGINAL FORM MUST BE PROVIDED. FACSIMILE ELECTRONIC OR PHOTOCOPIES ARE NOT ACCEPTABLE.

A bidder failing or refusing to enter into any awarded contract or purchase order within the required 10 working days following the Purchasing Services Section's issuance of request for documents notice shall forfeit the bid security. See Section 18-1-204(1), MCA. "Enter into any contract or purchase order" includes execution of the contract, submission of acceptable performance security and submission of any required liability insurance coverage and workers' compensation insurance coverage or exemption.

The bid security for the unsuccessful bids will be shredded, unless return is requested.

2.2. CONTRACT PERFORMANCE SECURITY – SURETY BONDS ONLY

The Contractor must provide contract performance security based upon 100% of the contract total. This security must be in the form of a surety bond licensed in Montana with a Best's rating of no less than A-. The surety bond must be supplied on the form designated by the State of Montana. The required form may be found at http://gsd.mt.gov/procurement/forms.asp and entitled "Contract Performance Bond." THE ORIGINAL FORM MUST BE PROVIDED. FACSIMILE ELECTRONIC OR PHOTOCOPIES ARE NOT ACCEPTABLE.

The contract performance security must be provided to the State of Montana within 10 working days from the Request for Documents Notice. This security must remain in effect for the entire term of the contract. A new surety bond must be issued to the State of Montana if this contract is renewed.

The original surety bond form must be provided to the following address: Purchasing Services Section, Attn: Richele Parkhurst, P.O. Box 20437, Billings, MT 59104-0437.

Ref:MCA Title 18, Chapter 4, Part 3; ARM, Title 2, Chapter 5, Sub-Chapter 5.

2.3. OWNER'S AND CONTRACTOR'S PROTECTIVE (OCP) LIABILITY INSURANCE

Obtain an Owner's and Contractor's Protective (OCP) liability insurance policy for all work to be done, on behalf of the owner (State of Montana, the Department, and its agents, employees and officers) to be submitted prior to contract execution, with a general aggregate limit of not less than \$2,000,000 and an occurrence limit of not less than \$1,000,000. The certificate must be received by the Purchasing Services Section, Attn: Richele Parkhurst, P.O. Box 20437, Billings, MT 59104-0437, within 10 working days of the Request for Documents Notice and must be kept current for the entire term of the contract.

Ref: Standard Specifications for Road and Bridge Construction, 2006 Edition supplemental, Section 107.13.1.

2.4. COMPLIANCE WITH WORKERS' COMPENSATION ACT

The Contractor is required to supply the Purchasing Services Section with proof of compliance with the Montana Workers' Compensation Act while performing work for the State of Montana. (Mont. Code Ann. §§ 39-71-401, 39-71-405, and 39-71-417.) Neither the Contractor nor its employees are employees of the State. The proof of insurance/exemption must be in the form of workers' compensation insurance, an independent contractor exemption or documentation of corporate officer status and must be received by the Purchasing Services Section, Attn: Richele Parkhurst, P.O. Box 20437, Billings, MT 59104-0437, within 10 working days of the Request for Documents Notice and must be kept current for the entire term of the contract.

CONTRACTS WILL NOT BE ISSUED TO CONTRACTORS WHO FAIL TO PROVIDE THE REQUIRED DOCUMENTATION WITHIN THE ALLOTTED TIME FRAME.

Coverage may be provided through a private carrier or through the State Compensation Insurance Fund (406) 444-6500. An exemption can be requested through the Department of Labor and Industry, Employment Relations Division (406) 444-1446. Corporate officers must provide documentation of their exempt status.

2.5. MONTANA PREVAILING WAGE REQUIREMENTS

2.5.1. Montana Resident Preference. The nature of the work performed, or services provided, under this contract meets the statutory definition of a "public works contract" in section 18-2-401, MCA. Unless superseded by federal law, Montana law requires that contractors and subcontractors give preference to the employment of Montana residents for any public works contract in excess of \$25,000 for construction or nonconstruction services in accordance with sections 18-2-401 through 18-2-432, MCA, and all administrative rules adopted in relation to these statutes.

Unless superseded by federal law, each contractor shall ensure that at least 50% of a contractor's workers performing labor on a construction project are bona fide Montana residents.

The Commissioner of the Montana Department of Labor and Industry has established the resident requirements in accordance with sections 18-2-403 and 18-2-409, MCA. Any and all questions concerning prevailing wage and Montana resident issues should be directed to the Montana Department of Labor and Industry.

2.5.2. Standard Prevailing Rate of Wages – Booklet Attached. In addition, unless superseded by federal law, all employees working on a public works contract shall be paid prevailing wage rates in accordance with sections 18-2-401 through 18-2-432, MCA, and all associated administrative rules. Montana law requires that all public works contracts, as defined in section 18-2-401, MCA, in which the total cost of the contract is in excess of \$25,000, contain a provision stating for each job classification the standard prevailing wage rate, including fringe benefits, travel, per diem, and zone pay that the contractors, subcontractors, and employers shall pay during the public works contract.

Furthermore, section 18-2-406, MCA, requires that all contractors, subcontractors, and employers who are performing work or providing services under a public works contract post in a prominent and accessible site on the project staging area or work area, no later than the first day of work and continuing for the entire duration of the contract, a legible statement of all wages and fringe benefits to be paid to the employees in compliance with section 18-2-423, MCA.

Section 18-2-423, MCA, requires that employees receiving an hourly wage must be paid on a weekly basis. Each contractor, subcontractor, and employer must maintain payroll records in a manner readily capable of being certified for submission under section 18-2-423, MCA, for not less than three years after the contractor's, subcontractor's, or employer's completion of work on the public works contract.

All contractors and employers shall classify each employee who performs labor on a public works project according to the applicable standard prevailing rate of wages for such craft, classification, or type of employee established by the Commissioner of the Montana Department of Labor and Industry, and shall pay each such employee a rate of wages not less than the standard prevailing rate as specified in the Montana Prevailing Wages Rates for Overlay project 2010.

2.6. CONTRACTOR REGISTRATION - FOR CONSTRUCTION

The Contractor is required to be registered with the Department of Labor and Industry under sections 39-9-201 and 39-9-204, MCA, *prior* to contract execution. The State cannot execute a contract for construction to a Contractor who is not registered and may award the contract to the next responsive Contractor if registration is not completed in a timely manner. (Mont. Code Ann. § 39-9-401.)

If you have a Contractor	Registration Number, list it	here:
•	•	

2.7. CONTRACTOR WITHHOLDING - FOR CONSTRUCTION

Section 15-50-206, MCA requires the state agency or Department for whom a public construction work contract over \$5,000 is being performed, to withhold 1% of all payments and to transmit such monies to the Department of Revenue.

2.8. DIESEL FUEL TAX

Pursuant to sections 15-70-310 through 15-70-336, MCA, the Contractor, any subcontractor or anyone using diesel fuel in motor vehicles, motorized equipment or the internal combustion of any and all engines, including stationary engines, is required to comply with the "special fuel use tax." A copy of a current special fuel users permit must be submitted prior to contract execution. Failure to provide this as required will result in disqualification of your bid.

This requirement applies to all diesel fuel used in connection with work performed on construction, reconstruction or other improvements on highways, streets or within public right-of-way as a result of any contract awarded by a public agency.

Questions on this provision may be addressed to:

FTMA Bureau Motor Fuels Information: (406) 444-7689
Administration Bureau
Department of Transportation
P.O. Box 201001
Helena, MT 59620-1001

2.9. INDEPENDENT CONTRACTOR

Due to requirements of Federal labor laws, individuals who are presently a Montana State employee will not be considered for potential award of the Agreement. A successful bidder, who, during the post-bid period or during the term of the Agreement, becomes a Montana State employee, must immediately notify in writing the Department's Field Maintenance Chief. Contractor agrees that, if it becomes a Montana State employee during those periods, <u>or</u> if it hires anyone to perform more than 50% of the work under the Agreement who is a Montana State employee, the Agreement is subject to immediate termination.

It is expressly agreed that the Contractor in fulfilling the terms of this Agreement is not an employee of the DEPARTMENT, but is solely an INDEPENDENT CONTRACTOR and not an employee of the DEPARTMENT.

2.10. PRECONSTRUCTION CONFERENCE

A mandatory preconstruction conference will be held between the Contractor and Department personnel. It is the responsibility of the Contractor to schedule the conference with the Department. This conference will be held a minimum of 5 working days prior to the start of work, including crushing or other work during the off season, unless the Maintenance Chief gives prior written approval. Scheduling for days and hours worked will be set at that time. The Department will designate a Project Manager at this conference. The Project Manager will be the authorized agent for the Department on this project.

The Helena Maintenance Review Section personnel will be considered as inspectors when on the job site.

2.11. CONFIRMATION OF AWARD/NOTICE TO PROCEED

After award has taken place, the successful Contractor will receive a "Request for Documents Notice" letter from the Purchasing Services Section. The "Request for Documents Notice" letter is not authorization to proceed with the project.

The purpose of the letter is to notify the Contractor that he/she must secure (a) proof of workman's compensation insurance coverage or exemption, (b) proof of liability insurance coverage and (c) contract performance security; and that these documents must be received by the Purchasing Services Section, Attn: Richele Parkhurst, 424 Morey Street in Billings before a "Notice to Proceed" with the project can be given.

Upon receipt by the Purchasing Services Section of the Contractor's proof of insurance and contract performance security, a purchase order will be officially signed. Receipt of the signed original purchase order by the Contractor shall be the Department's official "Notice to Proceed" with the project.

2.12. CIVIL RIGHTS

NON-DISCRIMINATION NOTICE

During the performance of this Agreement, <u>Contractor</u> (hereafter in this Section "the Party"), for itself, its assignees and successors in interest, agrees as follows:

A) COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 FOR FEDERAL-AID CONTRACTS

- (1) Compliance with Regulations: The Party shall comply with all Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation, 49 Code of Federal Regulations (CFR), Part 21, as they may be amended (hereafter referred to as the Regulations), which are incorporated by reference and made a part of this Agreement, even if only state funding is here involved.
- (2) <u>Nondiscrimination</u>: The Party, with regard to the work performed by it during the Agreement, shall not discriminate on the grounds of sex, race, color or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Party shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR Sec. 21.5.
- (3) <u>Solicitations for Subcontracts, Including Procurement of Materials and Equipment</u>: In all solicitations, whether by competitive bidding or negotiation by the Party for work to be performed under a subcontract, including procurement of materials or leases of equipment, any potential subcontractor or supplier shall be notified by the Party of the Party's obligations under this Agreement and the Regulations relative to nondiscrimination.
- (4) <u>Information and Reports</u>: The Party will provide all reports and information required by the Regulations, or directives issued pursuant thereto, and permit access to its books, records, accounts, other sources of information and its facilities as may be determined by State or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with Regulations or directives. Where any information required of the Party is in the exclusive possession of another who fails or refuses to furnish this information, the Party shall so certify to the Department or the FHWA as requested, setting forth what efforts it has made to obtain the information.
- (5) <u>Sanctions for Noncompliance</u>: In the event of the Party's noncompliance with the nondiscrimination provisions of this Agreement, State may impose sanctions as it or the FHWA determines appropriate, including, but not limited to,
 - (a) Withholding payments to the Party under the Agreement until the Party complies and/or
 - (b) Cancellation, termination or suspension of the Agreement, in whole or in part.
- (6) Incorporation of Provisions: The Party will include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Party will take such action with respect to any subcontract or procurement as the State or the FHWA may direct to enforce such provisions including sanctions for noncompliance: Provided, however, that in the event the Party is sued or is threatened with litigation by a subcontractor or supplier as a result of such direction, the Party may request the State to enter into the litigation to protect the interests of the State and, in addition, the Party or the State may request the United States to enter into such litigation to protect the interests of the United States.

B) COMPLIANCE WITH THE MONTANA GOVERNMENTAL CODE OF FAIR PRACTICES, SEC. 49-3-207, MCA

In accordance with Section 49-3-207, MCA, the Party agrees that for this Agreement all hiring will be made on the basis of merit and qualifications and that there will be no discrimination on the basis of race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability or national origin by the persons performing the Agreement.

- C) COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT (ADA)
 - (1) The Party will comply with all regulations relative to implementation of the AMERICANS WITH DISABILITIES ACT.
 - (2) The Party will incorporate or communicate the intent of the following statement in all publications, announcements, video recordings, course offerings or other program outputs: "The Party will provide reasonable accommodations for any known disability that may interfere with a person in participating in any service, program or activity offered by the Party. In the case of documents, recordings or verbal presentations, alternative accessible formats will be provided. For further information call the Party."
 - (3) All video recordings produced and created under contract and/or agreement will be closed-captioned.

D) COMPLIANCE WITH PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN DEPARTMENT OF TRANSPORTATION FINANCIAL ASSISTANCE PROGRAMS, 49 CFR PART 26

Each Agreement the Department signs with a Party (and each subcontract the prime contractor signs with a subcontractor) must include the following assurance:

The Party, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The Party shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Party to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

2.13. INDIAN RESERVATION WORK

Because all or part of this project is located within the external boundaries of an Indian Reservation, the following requirements apply:

- 2.13.1. Read, fully understands and agrees to the provisions here included.
- 2.13.2. Inquire with the designated Tribal official and become familiar with the Tribal requirements, written or not, for work in the Reservation, and submit it bid with full knowledge, understanding and acceptance of them. Understand and accept that (1) the Tribal laws, ordinances, regulations and requirements have been established by the Tribe as a sovereign entity on the Reservation, (2) the Department has no authority or ability to affect those requirements, and (3) neither the Tribal government nor any Tribal official or employee is acting in any way as an agent of the Department or the Transportation Commission. The Department and Commission have no control over the actions, inaction, requirements or comments of any Tribal government or employee, and are not bound by them.
- 2.13.3. If Tribal requirements will in any way increase the costs of performing the project, consider those and included any and all increased costs in it bid prices.

- 2.13.4. Ensure that all proposed subcontractors are also fully aware of the Tribal requirements, and accept them when they gave quotes.
- 2.13.5. Understand and agree that employees, and all subcontractors and their employees, are responsible to the Tribe to adhere to and abide by all Tribal laws, ordinances and regulations on work performed on the Reservation, specifically including all Indian hiring and contract fee requirements.
- 2.13.6. Dealings with the Tribe and its requirements are solely between the Contractor and the Tribe, and must be addressed in the appropriate forum between them alone.
- 2.13.7. By submitting a bid, agree to defend, protect, indemnify and save harmless the Department and State from any cost or delay caused or allegedly caused by or due to the failure of bidder or any subcontractor to fully comply with Tribal law, ordinance or regulation, or by claimed interference by the Tribe. Claims from such failure or claimed interference will not be considered extra work or compensable delay, but actual, documented and verified interference by Tribal government may be grounds for a contract time extension. Understand that any requests must fully comply with the contract's claims procedure.
- 2.13.8. By submitting a bid, do so with full understanding and acceptance of all provisions of the bid package.
- 2.13.9. If a Pre-Bid Conference for the project is provided for in the Contract, a designated, authorized agent of the Bidder attends the Conference.

For bidder inquiries to the Tribe, or for more information about Tribal requirements, it is required to contact the Tribe directly. The Point of Contact designated by the Tribe for bidders to contact is: <u>Lissa Peel</u>

3.0. SPECIAL PROVISIONS - CONTRACTOR PRODUCED PLANT MIX

3.1. PURPOSE

- 3.1.1. The purpose of this contract is to accommodate a variety of situations, at a number of locations, with regard to furnishing materials, equipment and labor for the production and laydown of plant mix.
- 3.1.2. Specific information pertaining to each project or stockpile location, including a brief description of the anticipated work, will be listed on a standard form. The completed forms will be attached to these provisions and thereby made a part of the contract. Bid items will be consolidated from each site into a standard format. Only those bid items with quantities listed are to be bid.

3.2. CONTRACT AUTHORITY

The Purchasing Services Section Supervisor will be the contract authority and the contract will be administered by a Maintenance Chief and/or District Administrator. The Maintenance Chief or District Administrator, based on mix design information, will determine the percent of oil to be added at each site.

3.3. AIR QUALITY

The Contractor is responsible for the air quality permit for hot plant operation and must meet the Department of Environmental Quality emission standards.

3.4. STOCKPILE LOCATION

- 3.4.1. Each stockpile location will be designated either Department furnished or Contractor furnished.
- 3.4.2. If the site is Department furnished, it will be adequate for plant mix production and stockpiling and its location will be identified by route and mile post on the standard stockpile form at the back of the proposal. If the aggregate is Department furnished, it will be conveniently located in stockpiled form.
- 3.4.3. If the site is Contractor furnished, the Contractor will be responsible for locating a site, obtaining all necessary permits, easements, agreements etc.
- 3.4.4. Regardless of who supplies the site, the Contractor is responsible for removing spilled oil, garbage and other debris, leaving each site in a neat, clean condition.

3.5. STANDARD SPECIFICATIONS

All references to the "Standard Specifications" shall be the Department's book entitled "Standard Specifications for Road and Bridge Construction", 2006 edition or as amended by current supplemental specifications. Current supplemental specifications may be obtained at the following web site: http://ftp.mdt.mt.gov/contract/stdspec_sup.pdf

- 3.5.1. The following Standard Specifications Sections apply in their entirety:
 - a. Section 101
 - b. Section 107
 - c. Section 411
 - d. Section 702
- 3.5.2. The following Standard Specifications Articles apply in their entirety:
 - a. 102.02, 102.04, 102.05, 102.06 and 102.16
 - b. 104.01
 - c. 105.01, 105.06, 105.07, 105.09, 105.10 and 105.11
 - d. 108.01, 108.04, 108.05, 108.06, 108.09 and 108.10
 - e. 109.01 and 109.08
 - f. 303.01, 303.02 and 303.03
 - g. 401.03.9, 401.04, except for 401.04.5 and 401.04.6
 - h. 402.04 and 402.05
 - i. 409.01 and 409.02
 - j. 411.04
 - k. 618.01, 618.02 and 618.03
 - I. 701.3, 713.02 and 713.06

- 3.5.3. The following portions of Standard Specification Articles shall apply:
 - a. 105.05 replace 1st sentence with the following: The Department will furnish the Contractor with 1 set of contract documents
 - b. 105.12 (reference to 105.03 is to 105.03.1 only)
 - c. 106.01.3 (reference to 105.03 is to 105.03.1 only), 106.02.5 and 106.02.6
 - d. 108.03 beginning with paragraph that starts with: obtaining air quality, water quality, etc., 108.03.1, paragraph 1 and continuing to end of article and 108.08 (with reference to table 108-1 only)
 - e. 109.04.2 paras (A) thru (E) and 109.04.3
 - f. 208.03.1
 - g. 301.03.2(C)
 - h. 401.02.4, 401.02.5, 401.03.1, 401.03.2, 401.03.4, 401.03.5, 401.03.8, 401.03.10, 401.03.11, 401.03.12(A), 401.03.13 and 401.03.14
 - i. 401.03.3; If the Contractor is furnishing the aggregate, then the following applies: The Department may require the Contractor to take samples off the cold feed (the Department will be a witness to the sample taking). If three (3) consecutive samples fail any of the tests, the Contractor will be shut down. The Contractor may not resume production until he/she has provided the Department with documentation that their aggregate now meets all specifications. Production can then resume on the project. Once the Contractor has resumed production, all gradation requirements will be according to 401.03.3 (C)(2), which is a lot-by-lot basis.
 - j. 401.03.6 paragraphs (1), (2), (4) and (5)
 - k. 402.03.2(A), 402.03.3, 402.03.4, 402.03.5(A)(C) and 402.03.6
 - I. 407.01, 407.03.1, 407.03.2, 407.03.3, 407.03.5, 407.04.1 and 411.03
 - m. 409.03.1, 409.03.2, 409.03.3, 409.03.4 and 409.03.5
 - n. 701.02.1, 701.02.8, 701.03.1 and 701.03.2

3.6. ADDITIONAL WORK

- 3.6.1. Any additional work performed under this provision shall be the same type of work for which the contract was awarded and will only apply if the Contractor is set-up and operational at a designated stockpile location. Subsequently, no additional compensation for the bid item "mobilization" will be allowed. The additional work provision will not apply if the Contractor has to be mobilized to a new designated stockpile location.
- 3.6.2. The Maintenance Chief reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the Contract nor release the surety, and the Contractor agrees to perform the work as altered. If additional work or changes in quantity significantly change the scope of work, an adjustment will be made to the contract. A significant change is defined as an increase in excess of 125% or a decrease below 75% of the original contract quantity item. Any adjustment for an increase in quantity shall apply only to that portion in excess of 125% of the original contract item quantity, or in case of a decrease below 75%, to the actual amount of work performed.
- 3.6.3. Payment for work under this provision will be at the unit price bid for work for which the contract was awarded. Any additional work must be within 20 miles from the center of the project. Any additional work must be for the same type as specified in the original contract.
- 3.6.4. Additional work can only be performed after prior approval of the Helena Maintenance Division Administrator and <u>written</u> addenda from the Purchasing Services Section. This addenda must be in the form of a Purchase Order Adjustment. The addenda will include the following information:
 - 3.6.4.1. A description of the work to be performed.
 - 3.6.4.2. Additional time adjustments, if any.
 - 3.6.4.3. The cost associated with the additional work.

3.7. QUANTITIES

- 3.7.1. The Department guarantees that no one stockpile site will contain less than 1,500 tons.
- 3.7.2. The Department reserves the right to increase or decrease quantities at each site and no additional compensation will be allowed by reason thereof. However, in no instance shall the quantity be reduced to less than 1,500 tons.

3.8. CONTRACT TIME

- 3.8.1. Contract time will be determined as follows:
 - 3.8.1.1. Designated Contract Date -- will be the actual calendar date by which all work under the contract shall be completed.

- 3.8.2. Prior to commencement of work, the Contractor shall submit a written proposed work schedule that accommodates the contract dates, to the Maintenance Chief. The Maintenance Chief may request changes to the schedule to best meet the needs of the Department as long as the changes do not impact the sequence of work or designated contract date to the point it changes the terms of the contract as bid. Once the schedule is approved by the Maintenance Chief and concurred with by the Contractor, subsequent changes to the schedule must be approved in writing by both the Maintenance Chief and the Contractor.
- 3.8.3. If the Contractor is unable to complete the work by the designated contract date for reasons beyond his control, such as inclement weather, he may request a change to the designated contract date from the Maintenance Chief. Such request shall be in writing and shall state the reasons for the request.

The Maintenance Chief will review the request and will provide the Contractor with a written response indicating approval, in which case a new designated contract date will be provided, or disapproval with appropriate reasons. If the Contractor is dissatisfied with the Maintenance Chief's response, he may appeal the decision to the District Administrator. The District Administrator 's decision is final.

3.8.4. In the event the Department increases quantities; additional days will be added to the contract by using the following formula:

 $A = \underbrace{B}_{C} \ X \ D \ Where: \ A = Time \ Extension in days \\ B = Total \ Dollar \ amount \ of \ additional \ work$

C = Total amount of contract as awarded

D = The original number of days, except Saturdays & Sundays, from the earliest designated stockpile date to the designated contract date.

Contract time will not be decreased due to a decrease in quantities.

Designated stockpile dates and designated contract date will be extended as appropriate to accommodate an increase in quantities.

- 3.8.5. The Contractor shall not work on Saturdays, Sundays or legal holidays observed by the state unless specifically approved in writing by the Maintenance Chief.
- 3.8.6. The sequence of operations to meet the designated contract dates shall be at the Contractor's discretion. The Maintenance Chief will be given a minimum of 48 hours notice prior to commencement of any work.
- 3.8.7. In the event the Contractor does not complete the work by the designated contract date or within the designated working days, liquidated damages will be assessed in the form of a daily charge for each day, except Saturdays, Sundays and legal holidays that exceed the designated contract date or working days. The daily charge will be determined from the schedule in Standard Specification Article 108.08 under calendar day. This charge will be deducted from money due the Contractor.
- 3.8.8. Contractor must furnish a hot plant and other equipment necessary to complete the project as specified. Furnishing of haul trucks and allotted project time are as listed below. A "Working Day" shall be defined as: starting with the first day that the plant is operational and continuing until the job is completed.
 - 3.8.8.1. Contractor must provide the haul trucks and complete the project within 7 working days of commencement of work.

3.9. MATERIALS

- 3.9.1. The Department will provide the mix design for all plant mix aggregate whether it's Department furnished or Contractor furnished. If the contract specifies Contractor-furnished aggregate, the Contractor will be responsible for supplying the Maintenance Chief with a representative sample of the material to be incorporated in the project, in sufficient quantity, to properly prepare a mix design. The Department requires at least 20 days to prepare each mix design. The 20-day period begins when the Materials Bureau in Helena receives the aggregate sample.
- 3.9.2. The aggregate and bituminous material for each stockpile location will be designated either Contractor furnished or Department furnished. At any stockpile location, the materials may be Contractor furnished, Department furnished or some combination of the two. If the Department provides the haul and the materials are Contractor furnished, and the Department does not designate a stockpile location, then the Department will not haul more than 10 one-way miles to the project, unless otherwise agreed to by the Maintenance Chief in writing.
- 3.9.3. If the aggregate and bituminous materials are Department furnished; the quantities for these materials will be shown for information purposes only. If the aggregate and bituminous material is Contractor furnished, estimated quantities will be provided. In all cases, estimated quantities of mixed material will be provided.
- 3.9.4. If the aggregate materials are designated Contractor furnished, they will be further designated as Plant Mix Surfacing Grade B, Plant Mix Surfacing Grade D or ½" Bituminous Plant Mix Material. The type designated must meet the requirements as per Standard Specification Article 701.03 or the ½" maintenance aggregate gradation as noted below:

½" Maintenance Material				
Sieve Size	Percent Passing By Weight			
1/2"	100			
3/8"	85 - 95			
No. 4	54 - 70			
No. 10	34 - 50			
No. 40	16 - 25			
No. 200	4 – 10			

At least 60 percent by weight of the coarse aggregate particles must have at least a two face facture.

Aggregate material must be non-plastic.

- 3.9.5. Asphalt materials furnished by the Contractor must meet the appropriate requirements of Standard Specification Section 702.
- 3.9.6. The Department reserves the right to specify hydrated lime, mineral filler or an antistripping additive.

3.10. EQUIPMENT

3.10.1. Equipment to accomplish the work anticipated in the contract may either be Department furnished, Contractor furnished or some combination of the two.

- 3.10.2. Equipment designated as Department furnished will be of adequate types and quantities to keep pace with the Contractor's production rate, but will not be itemized in the proposal.
- 3.10.3. Equipment designated as Contractor-furnished will be included as a required item under "Laid-In-Place Paving".
- 3.10.4. When included as incidental items to "Laid-In-Place Paving", all equipment provided and all hours worked will be included in the unit price bid and will be the responsibility of the Contractor.
- 3.10.5. In all instances, hot plants and support equipment (cold feed loader, silos, storage or surge bins etc.) will be furnished by the Contractor and the cost thereof will be included in mixing price per ton. Contractor must calibrate the hot plant, prior to the start of work, to the satisfaction of the designated project manager. Hot plants must also meet the following requirements:
 - 3.10.5.1. Amount (weight) of material produced will be measured in one of the following ways:
 - 3.10.5.1.1. Batch weights in automated batch plants will be permitted. Weight tickets shall be issued for each load if the plant is so equipped. If not, a batch counter shall be utilized. The Department will record the counter readings at the beginning and end of each day's production. The recorded weights will be accurate to within 0.5% of true weight and random loads may be required to be checked on approved commercial or Department owned scales.
 - 3.10.5.1.2. If platform scales are used, the Department will provide a scaleman and the wages for the scaleman will be deducted from money due the Contractor.
 - 3.10.5.2. Adequate personnel and support equipment shall be available to ensure an efficient operation.

3.11. TRAFFIC CONTROL

All traffic control will be provided by Department forces unless otherwise noted in the contract. Contractors must contact the Maintenance Chief prior to bidding to determine the extent of the Department's traffic control. If the Department is furnishing the traffic control and the Contractor wants to work longer days or weekends, then the Contractor must handle its own traffic control. The Department will not compensate the Contractor for this additional traffic control. Any traffic control furnished by the Contractor must comply with the MUTCD. Any costs associated with Contractor furnished traffic control must be included in the Contractor's bid for the project. No additional reimbursement will be paid for this service.

3.12. METHOD OF MEASUREMENT

The completed mix will be measured by the ton on approved scales after all mixing is complete. The pay weight will include all mixed ingredients, including mineral filler if specified. If a batch plant is used, the total weight will be determined by combining the weights of the ingredients.

If the contract specifies "Laid-In-Place Paving", all items, including equipment, anticipated to be required in the work, will be specified. The items specified shall be considered incidental to, and measured as part of the unit price bid for "Laid-In-Place Paving".

3.13. ACCEPTANCE

- 3.13.1. Partial Acceptance. If the Contractor substantially completes a unit or portion of the project, such as a structure, an interchange, a group of signs or delineators, or a section of road or pavement, the Contractor may request the Maintenance Chief to make final inspection of that unit. If the Maintenance Chief finds that the unit has been completed in compliance with the contract that unit may be accepted as being completed and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance shall not void or alter any of the terms of the contract.
- 3.13.2. Final Acceptance. When the Contractor provides proper notice of completion of the entire project, the Maintenance Chief will arrange to make a final inspection. Where all work is complete but deferment of final inspection is necessary due to causes not within the control of the Contractor, the Maintenance Chief will issue a suspend work order and no time charge shall accrue against the Contractor for such elapsed period. If the contract is found satisfactorily completed, the inspection shall constitute the final acceptance.

If the inspection discloses unsatisfactory work, the Maintenance Chief will give the Contractor the necessary instructions for correction and the Contractor shall immediately comply to remedy listed defects within seven (7) days of notice. When the Contractor has corrected the deficiencies, another inspection will be made and, provided the work has been satisfactorily corrected, the Maintenance Chief will then accept the project.

3.13.3. In the event of a discrepancy or grievance on the part of the Contractor or the Department, the affected party will make a written request for a hearing to the Purchasing Services Section Supervisor. This request must be made, in writing, no later than 30 days after the disagreement, questions or dispute has arisen. Upon receipt of the written request, a hearing date will be scheduled at the earliest possible convenience of all affected parties. A hearing committee will consist of the Contractor and Department representatives to include the Maintenance Division Administrator, Administration Division Administrator and the Chief Operations Officer(s). As this is not intended to be an adversarial meeting, but a problem-solving one, it is recommended that no party be represented by legal counsel at the hearing. Any resolution decided on as a result of this hearing will be binding for all parties involved. Contractor must notify the Purchasing Services Section Supervisor a minimum of 5 working days prior to the meeting if their legal counsel will be attending the meeting. If Contractor is to be represented by legal counsel and the Department's legal counsel is not available for the initially scheduled meeting, then the meeting will be rescheduled.

3.14. FAILURE TO COMPLETE THE PROJECT ON TIME

In the event the Contractor does not complete the work by the designated contract date, liquidated damages will be assessed in the form of a daily charge for each day, except Saturdays, Sundays and legal holidays that exceed the designated contract date or working days. The daily charge will be determined from Table 108-1 of Standard Specification Article 108.08 (that is current on the date of the bid-opening) under Daily Charge. This charge will be deducted from money due the Contractor.

Once the initial project has been completed (all stripes, words and symbols), liquidated damages will stop. No payment will be made for any route or site that has remove and replace markings until the measures have been corrected.

3.15. BASIS OF PAYMENT

- 3.15.1. Completed mix, whether by the ton for mixing, or "Laid-In-Place Paving", accepted by the Department will be paid for at the contract unit price per ton. This price and payment shall be full compensation for furnishing all labor, tools, equipment and incidentals necessary to complete the work.
- 3.15.2. Any batch or load of mix that contains a quantity of bitumen varying more than 0.5 of one percent from the percentage established by the Maintenance Chief may be rejected and no payment shall be allowed by reason thereof. The oil percentage will be determined by meter readings, material weights or measuring device calibrated to determine oil quantities in storage tanks.
- 3.15.3. Partial payment for work completed may be made with the approval of the Maintenance Chief.
- 3.15.4. Partial payment for aggregate that is produced or delivered and stockpiled at the project site or other approved location near the project site may be considered for partial payment, if the following requirements are met:
 - 3.15.4.1. The aggregate meets the contract requirements.
 - 3.15.4.2. The aggregate is stored to prevent damage and theft, without obstructing or impeding the traveling public.
 - 3.15.4.3. A written request for payment must be submitted to the Maintenance Chief. The request must include the quantity for which payment is requested and the length of time the material is to be stored.
 - 3.15.4.4. If the Contractor has subcontracted the crushing, then a notarized statement from the subcontractor certifying that their payment has been received must be included with the partial payment request.
 - 3.15.4.5. Partial payment will be made at the contract unit price for 35% of the quantity delivered and stockpiled.
 - 3.15.4.6. Partial payment is not an approval of the furnished aggregate. Approval of the furnished aggregate will be made at the time the aggregate is actually used.
 - 3.15.4.7. For the "Laid-in-Place Paving" line item, partial payment will be made for 35% of the total line item cost.
 - 3.15.4.8. No partial payment will be made on any "lump sum" bid items.
 - 3.15.4.9. Due to the duration of most maintenance projects, no partial payment progress estimates will be made. In those cases, only one final progress payment will be made. However, if a project is scheduled to last longer than 3 months a progress estimate will be done quarterly or every 3 months.

4.0. SPECIAL PROVISIONS – 401-2, ¾ INCH COMMERICIAL PLANT MIX BITUMIOUS SURFACING (Added 4-7-08)

4.1. DESCRIPTION

This work is producing, furnishing, placing and compacting Grade D or Grade S Plant Mix Bituminous Surfacing on an approved surface.

4.2. MATERIAL

Provide Grade D or Grade S Plant Mix Bituminous Surfacing with the specified asphalt binder, 1.4 percent hydrated lime, and aggregate meeting the following requirements. Use fillers or additives as necessary.

- 4.2.1. Grade D Aggregate Requirements. Meet Subsection 701.03.2 A. Plant Mix Bituminous Surfacing Grade D requirements. The gradation limits are defined in Table 701-15 A. Add the Job Mix Tolerance to the Job Mix Target Limits.
- 4.2.2. Grade S Aggregate Requirements. Meet the following aggregate requirements at the job mix formula combined ratio:

COARSE AGGREGATE (NO. 4 (4.75 mm) and larger)					
Angularity (MT-217 or ASTM D-5821)	See table 701-15B				
Wear (MT-209 or AASHTO T-96)	40% max.				
Flat and Elongated Particles (ASTM D-4791)					
(3:1 Ration; by mass; No. 4 (4.75 mm) and larger)	20% max.				

FINE AGGREGATE (NO. 8 (2.36 mm) and smaller)					
Angularity (AASHTO T-304 Method A)	45% min.				
Sand Equivalent (MT-213 or AASHTO T-176)	45% min.				
If aggregate cannot meet the Sand Equivalent, mee	t the following:				
Volume Swell, untreated aggregates (MT-305)					
Aggregate must be non-plastic (MT-208 or					
AASHTO T-89 & T-90)	10% max.				

4.2.3. Asphalt Binder. Furnish performance grade asphalt binder (PGAB) meeting Section 702, Table 702-9 and the grade specified in the contract. Use PG 64-28 asphalt binder if not specified elsewhere in the contract. Ensure PG 64-28, and PG 70-28 binders, after aging in the Rolling Thin Film Oven, and testing under AASHTO T-51 meet the following:

Pull Rate: 5 cm/minute Sample Temperature: 25°C Ductility: 30 cm, min. Notify the Project Manager in writing before making changes to the PGAB components.

- 4.2.3.1. Test Results. Provide current test results for all PGAB requirements for material furnished. Furnish the PGAB test data with the first delivery and for each 2000 tons (2000 mt) delivered to the project.
- 4.2.3.2. PGAB Shipping, Handling, and Storage. Ship, handle, and store the PGAB following the supplier's requirements. Ensure that the supplier's requirements are consistent with the material manufacturers. Reject any PGAB exhibiting separation, crusting, or foaming during delivery or in storage tanks.

- 4.2.3.3. Sampling. Sample the PGAB meeting Subsection 402.03.2 (B). A sample is two one-pint (two 500 ml) containers of PGAB. Sample fillers, hydrated lime, and additives, in accordance with MT-601.
- 4.2.4. Recycled Asphalt Pavement (RAP). Up to 25 percent RAP by weight may be incorporated into the mix. If RAP is included in the job mix formula and the final mix, meet the requirements of the selected surfacing type in this special provision. Aggregate and asphalt binder requirements B.1, B.2, and B.3 apply to virgin materials only. It is recommended that at least two separate RAP stockpiles be produced.
- 4.2.5. Mix Design and Materials Samples Grade D. Submit four copies of a proposed 75 blow Marshall mix design (MT-306) for Grade D Commercial Plant Mix Bituminous Surfacing to the Project Manager.

Include in the mix design the proposed aggregate gradation, asphalt content based on the total weight of the mix, hydrated lime, filler if any, and grade and source of the asphalt binder. Include the binder supplier's recommended mixing and compaction temperature ranges. For mix designs using RAP, furnish the RAP asphalt content, and virgin asphalt content, the RAP gradation and virgin aggregate gradation. Furnish all specific gravities.

Submit representative samples of the aggregates, 5 gallons (19 L) of the specified binder, and filler if any, a minimum of 30 calendar days before production. Ensure the samples provide at least 600 lb. (91 kg) of combined aggregate.

Meet the following requirements:

Stability:	1800 lb. minimum (8007 N minimum)
Flow:	8 to 16, or (2mm to 4mm)
Percent Air Voids:	2.0 – 4.0

Use MT 330 to determine the mixture resistance to moisture induced damage, modified as follows:

Compact the 6-inch (150 mm) diameter specimens to 3.75 inch \pm 0.20 inch (95 mm \pm 5 mm), at 7 \pm 1.0 percent air voids. Meet a tensile strength ratio of 0.7 or greater.

4.2.6. Mix Design and Materials Samples – Grade S. Submit four copies of a Grade S volumetric mix design following AASHTO M-323 and meeting AASHTO R-35, as modified in these provisions to the Project Manager. Include the binder supplier's recommended mixing and compaction temperature ranges. For mix designs using RAP, furnish the RAP asphalt content, and virgin asphalt content, the RAP gradation and virgin aggregate gradation. Furnish all specific gravities. Choose the Design Air Voids target to be the lowest value, within the range of 3.4 and 4.0, such that all other volumetric criteria are met. Report the dust/asphalt (D/A) ratio for the target asphalt content. The mix design is to be produced on a total weight of mix basis. On contracts with multiple gravel sources, or combination of gravel sources, provide a mix design and meet all the requirements in this provision for each source or combination of sources and suppliers. Furnish samples of aggregate from each stockpile to produce an 800 lb. (363 kg) sample when combined at the mix design ratio. Furnish five gallons (19 L) of the specified binder.

Meet the design requirements in Table 701-15B and Table 701-15B (1).

Table 701-15 B

	3/4 inch (19 mm) and 1/2inch (12.5 mm) Nominal Maximum Aggregate Size) GRADE S VOLUMETRIC MIXTURE DESIGN REQUIREMENTS												
¹ 20 Year Design ESALs		Number of Compactive Gyrations		Percent of Rice		Course Aggregate Angularity 1 face/ 2 face	VM	A %	VFA %	VTM % (Air Voids)	² (DP) Dust to effective binder ratio		
Total (million)	Daily	Initial (N _{ini})	Design (N _{des})	Max. (N _{max})	Max @ N _{ini}	@ N _{des}	Max @ N _{max}		N	kt ^{des} mum)	At N _{des} Range	At N _{des} Range	(P0.075/ Pbe) Range
									19.0 mm	12.5 mm			
< 0.3	<41	7	75	115	91.5	96- 96.6	98	75/ -	≥13. 0	≥13. 5	70 to 80	3.4 to 4.0	0.6 to 1.6
0.3 to < 3	41- 410	7	75	115	90.5	96- 96.6	98	85/80	≥13.0	≥13.5	65 to 78	3.4 to 4.0	0.6 to 1.6
3 to < 10	410- 1370	8	100	160	89	96- 96.6	98	85/80	≥13.0	≥13.5	65 to 78	3.4 to 4.0	0.6 to 1.6
≥ 10	≥ 1370	8	100	160	89	96- 96.6	98	95/90	≥13.0	≥13.5	65 to 78	3.4 to 4.0	0.6 to 1.6

¹ If ESAL's are not specified in the contract, use the 3-10 million ESAL design requirements in table 701-15 B to develop the mix design, unless otherwise directed by the Project Manager.

Table 701-15 B (1)

GRADE S AGGREGATE MIXTURE DESIGN AND PRODUCTION REQUIREMENTS 3/4 inch (19 mm) Nominal Maximum Aggregate Size)					
	¾ in (19	9.0 mm)			
Sieve	Min	Max			
1 inch (25 mm)	100				
3/4 inch (19 mm)	90	100			
½ inch (12.5 mm)		90			
3/8 in (9.5 mm)					
4 M (4.75 mm)					
8 M (2.36 mm)	23	49			
16 M (1.18 mm)					
30 M (0.600 mm)					
50 M (0.300 mm)					
100 M (0.150 mm)					
200 M (0.075 mm)	2	8			

4.2.7. The Department may use Hamburg Wheel Track testing to verify the plant mix design for both Grade D and Grade S. The Department has thirty calendar days from receipt of the mix design materials and signed mix design documents to review proposed mix designs.

² In addition to meeting the DP requirement at mix design, report the dust/asphalt ratio (D/A) on the mix design.

4.3. CONSTRUCTION REQUIREMENTS

Produce plant mix meeting Table 701-15 B (1), Table 701-15 C, and 701-15 D.

701-15 D

COMMERCIAL PLANT MIX REQUIREMENTS 3/4 inch (19 mm) and 1/2inch (12.5 mm) Nominal Maximum Aggregate Size						
Volumetric Property		ix Limits 3 @ Ndes	Job Mix Limits Grade D			
Voids in Mineral Aggregate	ral 3/4 inch (12inch (19 mm) (12.5 mm)		N/A			
(VMA)	13.0 to 17.0	13.5 to 18.0	IN/A			
Voids Filled with Asphalt (VFA)	65	to 80	N/A			
Voids in Total Mix. (VTM)*	2.5	to 5.0	2.0 to 4.0			
Dust/Asphalt Ratio (D/A)	0.6	to 1.6	N/A			
Stability	N	I/A	1800 lb. minimum (8007 N minimum)			
Flow	N	I/A	8 - 16, or (2 - 4 mm)			

^{*} Percentages or Quantities of hydrated lime will not be subtracted from the aggregate gradation.

- 4.3.1. Produce Commercial Plant Mix Bituminous Surfacing in a plant capable of accurately proportioning and uniformly mixing all ingredients. Do not begin plant mix production until receiving notification that the Department's mix design verification is complete. Contract time will be extended; day for day without any other compensation for Department caused delays beyond the allowed thirty calendar days from receipt of the mix design materials, if the delay affects the start of paving as shown on the Contractors work schedules. Contract time will not be extended if the delay occurs between November 1 and April 15.
- 4.3.2. Hamburg Wheel Tracking. The Department may require Hamburg samples at any time. Provide the Project Manager samples of plant mix surfacing material for Hamburg Wheel Track acceptance as directed.

Remove and replace any plant mix represented by a failing Hamburg test at no cost to the Department.

When a Hamburg sample does not meet the requirements, suspend production and submit a revised mix design and samples for verification and Hamburg Wheel Track testing. Do not resume production until the revised mix design is verified and Hamburg Wheel Track mix design requirements are met.

Table 701-15 C

HAMBURG WHEEL TRACK REQUIREMENTS AT 122° F (50° C)						
PG Binder Grade	Not To Exceed 0.5" (13 mm) Rut in Number of Passes					
	Produced Plant Mix Mix Design					
PG 58-28 and PG 64-22 and PG 64-28	10,000 Passes	15,000 Passes				
PG 70-28	15,000 Passes	20,000 Passes				

Follow the binder supplier's recommended mixing and compaction temperature ranges.

Place mix meeting Subsections 401.03.6 thru 401.03.11.

4.3.3. Weigh System. Use state certified automatic weigh systems to weigh materials. Ensure the weigh accuracy is within plus or minus 0.5 percent of the true weight throughout the use range.

Include in the system an automatic printer that provides the following information:

- 4.3.3.1. Project No. (as shown on plans)
- 4.3.3.2. Item Name (as shown on detail estimate)
- 4.3.3.3. Date
- 4.3.3.4. Time
- 4.3.3.5. Ticket Number
- 4.3.3.6. Haul Unit No.
- 4.3.3.7. Net tons (metric ton) in load (to nearest 0.05 ton)
- 4.3.3.8. A subtotal of tons (metric tons) for each haul unit since the beginning of the shift.
- 4.3.3.9. An accumulated total for all haul units since the beginning of the shift.

Use a pre-programmed printer or one equipped to prevent manual override of any weight information. Have the weigh system tested, certified, and sealed by the State Bureau of Weights and Measures after each plant move and before production for a project. Immediately stop production should the printer malfunction or breakdown and do not resume until corrected.

The Project Manager may randomly designate the re-weighing of loaded vehicles.

Re-test the plant weigh system any time the difference between the re-check and the plant system exceeds plus or minus one half of one percent of the load. Any weight difference will be addressed under Subsection 109.01.1.

4.3.4. Roadway Equipment. Use roadway equipment that meets the provisions of Subsection 401.03.2(F).

- 4.3.5. Density Acceptance by Cores.
 - 4.3.5.1. Compaction Control Testing. Perform all necessary density testing to control compaction. Revise the first sentence of Subsection 401.03.12(A) to read:

Once the plant mix is spread, struck off, and surface irregularities are corrected, compact the plant mix to at least 93 percent of the target Maximum Specific Gravity as determined using MT-328. A 1.05 pay factor will be applied to the lots of plant mix surfacing when the average density for the lot (Xn) is between 94 percent and 95 percent, inclusive, of the Maximum Specific Gravity (Rice Method) and the range (R) is three or less.

4.3.5.2. Acceptance Testing. Rescind Subsection 401.03.12(D) and replace with the following:

Core locations will be selected randomly based on the tons of mix placed. Provide cores to the Project Manager after all rolling is complete and before the roadway is open to traffic. Areas within 1 ft (300 mm) of a free edge, or where the planned nominal thickness is less than 0.1 feet (30 mm), are excluded from testing. The pavement density is determined at randomly selected locations after all rolling is complete and before the roadway is open to traffic.

Provide two 4 inch (100 mm) or two 6 inch (150 mm) cores of the full depth of the plant mix surfacing extracted from within a radius of 7.5 inch (190 mm) of each designated location. Remove free water from each core hole, place and compact new plant mix in 2 inch (50 mm) lifts to the finished surface. Mark each core as directed by the inspector witnessing the coring.

Separate the plant mix lift to be tested from the total core. Cut the core to the actual lift thickness within plus or minus 0.15 inch (4 mm). The Department recommends using a saw to separate the lift to be tested from the total core. Perform this work within the project limits or other approved location.

Furnish the cores immediately to the inspector after it is removed, marked and separated. Do not remove the cores from the inspector's visual control at any time. Recore as directed any time either Contractor requirements or procedures of part C. 5 Density Acceptance by Cores are not met. The test results of the replacement core to be used in the QA evaluation of the lot represented will be the actual relative in-place density of the replacement core or 92 percent, whichever is less. The plant mix in the sublot represented is considered to be not meeting density specifications.

The Bulk Specific Gravity (MT-314) determined for each core will be divided by the target Rice density in effect at the time the plant mix was produced to determine the relative in-place density. The average of the results of the pair of cores from each location will be expressed as the percent of relative density.

The approximate mix quantity represented by each sublot is 600 ton (600 mt). Additional locations and tests may be required. The quantity represented by 5 tests or approximately 3,000 ton (3,000 mt) of mix constitutes a lot whenever production schedules and material continuity permit. A lot represented by 3 to 7 consecutive random sublots will be established when there are short production runs, significant material changes, or other unusual characteristics of the work.

All costs of furnishing the cores will be considered incidental to Plant Mix Bituminous Surfacing items and no separate measurement or payment will be made.

4.3.5.3. Acceptance. Rescind Subsection 401.03.12 (E) and replace with the following:

Plant mix surfacing is evaluated for density on a lot-by-lot basis under Subsection105.03.2, except as noted in Subsection 401.03.12(B). Change the "F" factor for the Compaction element in Table 105-2 Table of Price Reduction Factors from 12 to 6 for plant mix furnished under this provision.

- 4.3.6. Plant Mix Sampling and Acceptance. Commercial Plant mix surfacing will be tested in accordance with MT 306 for Grade D and MT 332 for Grade S Plant Mix Surfacing. Furnish the Project Manager a 45 lb (20 kilograms), or larger sample as directed, of plant mix surfacing material. The Project Manager will randomly select when plant mix samples are taken. A Department inspector will witness plant mix sampling. Furnish the sample to the inspector immediately after it is taken if requested or deliver the sample to the Departments designated test location after the inspector seals the sample in a tamper proof container.
 - 4.3.6.1. PGAB, asphalt binder meeting requirements specified elsewhere in this provision.
 - 4.3.6.2. Grade D Gradation, meet requirements of Table 701-15A
 - 4.3.6.3. Asphalt Binder content, allowable tolerance +/- 0.3% of the mix design or field established job mix formula.

A 5 percent price reduction (15 percent maximum), in the unit bid price for Commercial Plant Mix Surfacing will be applied for each test not meeting the VMA, VFA, VTM, D/A Stability, Flow, Aggregate Requirements or Asphalt Content specified. Price reductions will be assessed on the quantity of material represented by each failing sample. The quantity of material represented by each sample is the total tons of material produced divided by the total number of samples representing the material.

- 4.3.7. Test Procedures. Commercial plant mix surfacing will be evaluated using the applicable test procedures below.
 - 4.3.7.1. MT-303 Sampling Bituminous Materials
 - 4.3.7.2. MT-311 Marshall Method for Field Control of Hot Mix Asphalt Paving
 - 4.3.7.3. MT-314 Method of Test for Bulk Specific Gravity of Compacted Bituminous Mixtures
 - 4.3.7.4. MT-321 Maximum Specific Gravity of Bituminous Mixtures (Rice Method)
 - 4.3.7.5. MT-319 Ignition Oven Burn Procedure
 - 4.3.7.6. MT-320 Gradation of Aggregate Recovered by MT-319 Ignition Oven Burn Procedure
 - 4.3.7.7. MT-328 Method of Establishing Field Target Density for Plant Mix Surfacing Density Control

4.3.7.8. MT 332 – Gyratory Compaction of Bituminous Mixtures
 4.3.7.9. MT 330 – Resistance of Bituminous Mixture to Moisture Induced Damage
 4.3.7.10. MT 334 – Wheel Tracking Test Procedure (Hamburg Device)

4.4. METHOD OF MEASUREMENT

Commercial Plant Mix Surfacing will be measured according to Subsection 401.04.1.

4.5. BASIS OF PAYMENT

Commercial Plant Mix Surfacing will be paid for according to Subsection 401.05 except that no separate payment will be made for asphalt cement, fillers, hydrated lime, additives, and tack.

Payment at the contract unit price is full compensation for all necessary resources to complete the item of work under the contract

5.0. CENTERLINE

It will be the responsibility of Department personnel to determine the centerline.

6.0. AWARD

Award will be made to one (1) Contractor whose valid bid meets all terms, conditions, specifications and dates as stated herein.

The prospective Contractor may take "exception" to bid terms, conditions, specifications and dates listed herein; or, the prospective Contractor may submit an "alternate" proposal. However, the Department reserves the right to disqualify any and all bids submitted which include either "exceptions" or "alternates." Additionally, the Department reserves the right to reject any and all bids if deemed to be in the Department's best interest.

The Department also reserves the right, due to reduced funding, due to failure of the successful contract to secure an approved air quality permit, or due to weather/seasonal consideration, to cancel all or any single or multiple project sites as referenced herein, if deemed in the Department's best interest.

CONTRACT INFORMATION

PROJECT SITE: SOUTH EDGE OF RONAN SOUTH

ROUTE: <u>US-93 NORTH</u>
MILEPOST: <u>46.5 TO 44.9</u>

SPECIFICATIONS FOR WORK:

Contractor will provide all labor, equipment, materials, incidentals and traffic control necessary to produce, haul, place, tack and compact approximately 3,953 tons 3/4" Grade D Commercial Plant Mix using PG 64-22 liquid asphalt. The overlay shall be paved 0.15 feet thick and approximately 44 feet wide for six tenths of a mile and 40 feet wide for one mile. Also to be paved are 15 private approaches (3' x 932') and 5 public approaches (12' x 438'). Milling will be completed on both ends of the project (44' x 50' on the North end and 40' x 50' on the South end). The Department will haul millings and provide striping and pavement markings.

CONTACT PERSON: <u>JACK MAY</u>	PHON	E NUMBER:	(406) 523-5803
**Commercial plant mix 3/4" Grade D specifications? X	Yes	☐ No	
**Traffic Control? X Contractor Department			
**Are there any ADA requirements associated with this pr	oject?	☐ Yes 2	<u>(</u> No
**Is this, or any part of this project on a reservation? X	Yes [□ No	
If Yes, which reservation? FLATHEAD INDIAN RI	<u>ESERVA</u>	<u>TION</u>	

DESIGNATED CONTRACT DATE:

WORK IS <u>REQUIRED</u> TO BE COMPLETED ON OR BEFORE: <u>JUNE 25, 2010</u>

QUANTITY SHEET

Item & Description	Unit of Measure	Quantity	Unit Price	Total Price
Mobilization	Per L.S.	1.0	\$	\$
Commerical Plant Mix Grade D (PG 64-22)	Per Ton	<u>3,953.0</u>	\$	_ \$
Cold Milling (avg. depth <u>0.15'</u>)	Per S.Y.	490.0	\$	_ \$
Traffic Control	Per L.S.	1.0	\$	_ \$
		GRA	AND TOTAL:	<u>\$</u>

NOTE: Contractors must extend and total their bid. All measurements are in English units.

The incidental items listed below are anticipated to be required in the work and are to be included in the unit price bid per ton for "Laid-In-Place Paving". This may not be all equipment needed. The Contractor is required to furnish any and all equipment necessary to complete the project. All quantities are estimated quantities.

- 3,953 Tons Aggregate Grade: D
 - X Paver: Size Sufficient to keep pace with the hot plant and equipped with a slope shoe
 - X Vibratory Roller
 - X Pneumatic Roller
 - X Hauling Units: (Belly Dumps or End Dumps)
 - X Cold Milling Machine
 - X Distributor

CONDITIONS OF BID DISQUALIFICATION:

Failure on the part of the Contractor to display Invitation for Bid #HWY-309600-RP on the outside of the envelope containing a sealed bid <u>will result in bid disqualification</u>.

HAVE YOU REMEMBERED TO:

- Check our website for the latest addendum to the IFB
- Sign and return each addendum as required
- Properly identify return envelope
- Sign your bid on the front page
- Initial any bid changes you made
- Submit bid security
- List Contractor registration number
- Review and complete all requirements listed herein to ensure compliance

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call Richele Parkhurst at (406) 657-0274 Voice or 1-800-335-7592 TTY or TTY (406) 444-7696.

PRECONSTRUCTION MEETING TOPICS

The following is list of suggested topics for the Preconstruction meeting with the Contractor. The Preconstruction meeting is a requirement part of the Pavement Preservation Plant Mix Contract and must be held at least 5 days prior to the commencement of work:

- Designate Department and Contractor Project Managers for the project
- Chain of Command
- Ensure all the required permits have been obtained by the Contractor
- Work shifts and schedules (Holidays)
- Start date
- Number of working days and exceptions
- Traffic control operations
- Contract specifications for work
- Weather day procedure
- Source of aggregate material
- Review of haul routes to be used by Contractor
- Notification of city/county
- Haul route damage (107.10)
- Road breakup that is being overlaid
- ADA requirements, if applicable
- Leveling course, if applicable
- Marshall Trailer power and testing
- Mix design
- Hot plant calibration
- Tonnage/yield
- Weight tickets (collection point etc)
- Department hauling, if applicable
- Gradation testing of aggregate, if applicable
- Milling requirements
- Tack coat requirements
- Aggregate stockpile concerns, if applicable
- Density testing or establishment of a roller pattern
- Additional work
- Dispute resolution
- Contractors use of Department owned materials
- Safety meeting (after hours safety)
- Centerline
- Asphalt sampling
- Stations
- Restrooms
- Rumble Strips
- Stockpile reclamation
- Environmental considerations; pit, plant and staging areas
- Certified flaggers
- Material certifications
- Clean-up following project completion
- Continuous paving

PAVEMENT PRESERVATION PROJECT WORK DAYS

Based on Total Tonnage and Hot Plant Size

Total	Hot Plant Size (Per Hour)									
Tonnage	150	200	250	300	350	400	450	500		
1,000	5	5	5	5	5	5	5	5		
2,000	5	5	5	5	5	5	5	5		
3,000	5	5	5	5	5	5	5	5		
4,000	5	5	5	5	5	5	5	5		
5,000	5	5	5	5	5	5	5	5		
6,000	5	5	5	5	5	5	5	5		
7,000	7	5	5	5	5	5	5	5		
8,000	8	6	5	5	5	5	5	5		
9,000	9	7	6	5	5	5	5	5		
10,000	10	8	6	5	5	5	5	5		
11,000	11	9	7	6	5	5	5	5		
12,000	13	9	8	6	5	5	5	5		
13,000	14	10	8	7	6	5	5	5		
14,000	15	11	9	7	6	5	5	5		
15,000	16	12	9	8	7	6	5	5		
16,000	17	13	10	8	7	6	6	5		
17,000	18	13	11	9	8	7	6	5		
18,000	19	14	11	9	8	7	6	6		
19,000	20	15	12	10	8	7	7	6		
20,000	21	16	13	10	9	8	7	6		

Work Days = $\underline{\text{total tons}}$ divided by 8 hrs/day plus 25% tons/hour

NOTE: a 5-day minimum